THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

RFCYBER CORP.,	§	
	§	
v.	§	CASE NO. 2:20-CV-274-JRG
	§	[LEAD CASE]
GOOGLE LLC, GOOGLE PAYMENT	§	
CORP.	§	
	§	
	§	
RFCYBER CORP.,	§	
	§	
v.	§	CASE NO. 2:20-CV-335-JRG
	§	[MEMBER CASE]
SAMSUNG ELECTRONICS CO., LTD.,	§	
SAMSUNG ELECTRONICS AMERICA,	§	
INC.	§	

CLAIM CONSTRUCTION
MEMORANDUM AND ORDER

Before the Court is the Opening Claim Construction Brief (Dkt. No. 116) filed by Plaintiff

RFCyber Corp. ("Plaintiff" or "RFCyber" or "RFC"). Also before the Court is the Responsive

Claim Construction Brief (Dkt. No. 122) filed by Defendants Samsung Electronics Co., Ltd. and

Samsung Electronics America, Inc. ("Defendants" or "Samsung")[1] as well as Plaintiff's reply

(Dkt. No. 124).

The Court held a claim construction hearing on October 27, 2021.

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[1] Defendants Google LLC and Google Payment Corp. (collectively, "Google") have been
dismissed. (*See* Dkt. Nos. 72–73, 127, 129.)

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I. BACKGROUND

Plaintiff alleges infringement of United States Patent Nos. 8,118,218 ("the '218 Patent"),

8,448,855 ("the '855 Patent"), 9,189,787 ("the '787 Patent"), and 9,240,009 ("the '009 Patent")

(collectively, "the patents-in-suit" or "the asserted patents"). (Dkt. No. 116, Exs. A–D). Plaintiff

submits that the patents-in-suit "are directed to various aspects of a mobile payment system." (Dkt. No. 116 at 2.)

The '218 Patent, titled "Method and Apparatus for Providing Electronic Purse," issued on February 21, 2012, and bears a filing date of September 24, 2006. The Abstract of the '218 Patent states:

> Techniques for portable devices functioning as an electronic purse (e-purse) are disclosed. According to one aspect of the invention, a mechanism is provided to enable a portable device to conduct transactions over an open network with a payment server without compromising security. In one embodiment, a device is loaded with an e-purse manager. The e-purse manager is configured to manage various transactions and functions as a mechanism to access an emulator therein. The transactions may be conducted over a wired network or a wireless network. A three-tier security model is contemplated to support the security of the transactions from the e-purse. The three-tier security model includes a physical security, an e-purse security and a card manager security, concentrically encapsulating one with another. Security keys (either symmetric or asymmetric) are personalized within the three-tier security model.

The '855 Patent resulted from continuations of the '218 Patent. The '787 Patent, in turn, resulted from a continuation of the '855 Patent. The '009 Patent resulted from a continuation-in-part of the '218 Patent.

Samsung submits: "RFCyber has accused Samsung of infringing claims 1, 3, 7–9, 11, 14–15, and 17 of the '218 patent, claims 1–6, 10, and 12 of the '855 patent, claims 1–3, 6, 8, 11, 13, 16, and 18 of the '787 patent, and claims 1, 6–7, 10, 14, and 16 of the '009 patent (collectively, the 'Asserted Claims')." (Dkt. No. 122 at 2 n.3.)

Plaintiff previously also asserted United States Patent No. 10,600,046 ("the '046 Patent"). (Dkt. No. 1, Ex. E). Plaintiff did not elect any claims from the '046 Patent in its election of asserted claims filed on September 15, 2021 (Dkt. 110, Ex. A), so Plaintiff no longer asserts the '046 Patent in the present case.

II. LEGAL PRINCIPLES

It is understood that "[a] claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is clearly an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970–71 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

To ascertain the meaning of claims, courts look to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent's claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee's invention. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

This Court's claim construction analysis is substantially guided by the Federal Circuit's decision in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Id.* at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id.* The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention and that patents are addressed to, and intended to be read by, others skilled in the particular art. *Id.*

Despite the importance of claim terms, *Phillips* made clear that "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of "a fully integrated written instrument." *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314–17. As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims." *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of

the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw*

PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

> Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Phillips, 415 F.3d at 1316. Consequently, *Phillips* emphasized the important role the specification

plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation.

Like the specification, the prosecution history helps to demonstrate how the inventor and the

United States Patent and Trademark Office ("PTO") understood the patent. *Id.* at 1317. Because

the file history, however, "represents an ongoing negotiation between the PTO and the applicant,"

it may lack the clarity of the specification and thus be less useful in claim construction proceedings.

Id. Nevertheless, the prosecution history is intrinsic evidence that is relevant to the determination

of how the inventor understood the invention and whether the inventor limited the invention during

prosecution by narrowing the scope of the claims. *Id.*; *see also Microsoft Corp. v. Multi-Tech Sys.,*

Inc., 357 F.3d 1340, 1350 (Fed. Cir. 2004) (noting that "a patentee's statements during

prosecution, whether relied on by the examiner or not, are relevant to claim interpretation").

Phillips rejected any claim construction approach that sacrificed the intrinsic record in

favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court

condemned the suggestion made by *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193

(Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through

dictionaries or otherwise) before resorting to the specification for certain limited purposes.

Phillips, 415 F.3d at 1319–24. According to *Phillips*, reliance on dictionary definitions at the

expense of the specification had the effect of "focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent." *Id.* at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.*

"In some cases, however, the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015) (citation omitted). "In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the 'evidentiary underpinnings' of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal." *Id.* (citing 517 U.S. 370).

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323–25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant. *Id*.

The Supreme Court of the United States has "read [35 U.S.C.] § 112, ¶ 2 to require that a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910, 134 S. Ct. 2120, 2129 (2014). "A determination of claim

indefiniteness is a legal conclusion that is drawn from the court's performance of its duty as the construer of patent claims." *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005) (citations and internal quotation marks omitted), *abrogated on other grounds by Nautilus*, 572 U.S. 898. "Indefiniteness must be proven by clear and convincing evidence." *Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

III. AGREED TERMS

In their August 19, 2021 P.R. 4-3 Joint Claim Construction and Prehearing Statement (Dkt. No. 101) and their October 14, 2021 P.R. 4-5(d) Joint Claim Construction Chart (Dkt. No. 73, Ex. A at 3–4), the parties submitted the following agreements:

Term	Agreed Construction
"emulator" '218 Patent, All Claims '855 Patent, All Claims '787 Patent, All Claims	"hardware device or program that pretends to be another particular device or program that other components expect to interact with"
"midlet" '218 Patent, All Claims '855 Patent, All Claims '787 Patent, All Claims	"software component suitable for being executed on a portable device"
"payment gateway" '046 Patent, All Claims	"server or collection of servers for settling a payment"

IV. DISPUTED TERMS

The parties organize the disputed terms slightly differently in their briefing. Rather than attempt to divine an ideal arrangement of the disputed terms, the Court adopts the ordering set forth in Plaintiff's opening brief.

Also, the parties have set forth their positions on the qualifications of a person of ordinary skill in the art, but neither side argues that any differences between the parties in this regard has any significance when addressing the claim construction disputes. (*See* Dkt. No. 116 at 1–2; *see also* Dkt. No. 122 at 6.)

1. "security channel"

"security channel" ('218 Patent, All Claims; '855 Patent, All Claims; '787 Patent, All Claims; '009 Patent, All Claims)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning	"protected channel established by keys"

(Dkt. No. 126, Ex. B at 2.)

(a) The Parties' Positions

Plaintiff argues that "'security' is a readily understandable word," and "Defendants identify no disclaimer or definition that limits a security channel to one 'established by keys.'" (Dkt. No. 116 at 4.) As to the prosecution history cited by Defendants, Plaintiff argues that "the question of whether a channel established by keys *could* meet the limitation is distinct from whether *only* channels established by keys can meet the limitation." (*Id.*)

Defendants respond that "the Asserted Patents use the term 'secured channel' interchangeably with the term 'security channel.'" (Dkt. No. 122 at 34.) Defendants also argue that "a POSITA would understand that the secured channels and security channels described in the patents are established using 'keys,'" and "[t]he Asserted Patents do not disclose any secured channel or security channel that is not established by keys." (*Id.* at 35, 36.) Further, Defendants argue that "there can be no genuine dispute that a security channel and secured channel must be

'protected.'" (*Id.* at 36.) Finally, Defendants argue that "RFCyber fails to address the extrinsic evidence that supports Defendants' construction." (*Id.* at 37.)

Plaintiff replies that "nothing in the specification *requires* the use of keys to create a security channel," which are only "one way of creating a security channel." (Dkt. No. 124 at 2.)

At the October 27, 2021 hearing, Defendants argued that although the specification contains no explicit disclaimer, the specification does not disclose any other way of providing a "security channel" or "secure channel." Plaintiff argued that keys do not *perform* the establishing. At most, Plaintiff argued, keys are *used* during the process of establishing.

(b) Analysis

Claim 1 of the '218 Patent, for example, recites in part (emphasis added):

1. A method for providing an e-purse, the method comprising:
    . . .
    personalizing the e-purse applet by reading off data from the smart card to generate in the smart card one or more operation keys that are subsequently used to establish a *secured channel* between the e-purse applet and an e-purse security authentication module (SAM) external to the smart card, wherein said personalizing the e-purse applet comprises:
        establishing an initial *security channel* between the smart card
            and the e-purse SAM to install and personalize the e-purse
            applet in the smart card, and
        creating a *security channel* on top of the initial *security channel*
            to protect subsequent operations of the smart card with the
            e-purse SAM, wherein any subsequent operation of the
            emulator is conducted over the *security channel* via the e-
            purse applet.

As a threshold matter, Defendants' proposal of requiring a "protected" channel is consistent with disclosures in the specification regarding using "security" mechanisms to "protect data." *See, e.g.*, '218 Patent at 3:51–52. Plaintiff does not demonstrate that "security" has any other meaning in this context.

As to Defendants' proposal that the channel must be "established by keys," Defendants

cite disclosure that:

> Security keys (either symmetric or asymmetric) are personalized within the three-tier security model so as to personalize an e-purse and perform secured transaction with a payment server. . . . During a transaction, the security keys are used to establish a secured channel between an embedded e-purse and an SAM . . . or backend server.

'218 Patent at 1:65–2:8; '009 Patent at 2:53–63 (similar);'218 Patent at 3:66–4:2 (similar).

Defendants also cite disclosure regarding "updat[ing] security keys to establish appropriate

channels for interactions between the server and the applets . . . ." '218 Patent at 4:41–46; '009

Patent at 10:36–40.

These disclosures regarding security keys, however, refer to specific details of particular

disclosed embodiments that should not be imported into the claims. *See Phillips*, 415 F.3d at 1323.

Defendants identify no definition or disclaimer in which the patentee limited the term "security

channel" so as to require being "established by keys." Indeed, Claim 1 of the '009 Patent, for

example, expressly recites "establishing a secured channel between the secure element and the

server using a key set installed on the secure element," which is an additional reason to reject

Defendants' proposal to introduce an "established by keys" requirement into all of the claims.

The Court therefore construes **"security channel"** to mean **"protected channel."**

2. "secured channel"

<table>
<tr><td colspan="2" align="center">"secured channel"
('218 Patent, All Claims; '009 Patent, All Claims)</td></tr>
<tr><td>Plaintiff's Proposed Construction</td><td>Defendants' Proposed Construction</td></tr>
<tr><td>Plain and ordinary meaning</td><td>"protected channel established by keys"</td></tr>
</table>

(Dkt. No. 126, Ex. B at 2.)

Prior to the start of the October 27, 2021 hearing, the parties notified the Court that the parties now agree that the term "secured channel" should be given the same construction as the above-discussed term "security channel."

The Court therefore construes **"secured channel"** to mean **"protected channel."**

3. "security channel on top of the initial security channel"

"security channel on top of the initial security channel" ('218 Patent, All Claims; '855 Patent, All Claims; '787 Patent, Claims 6–7, 16–17)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning	Indefinite

(Dkt. No. 116 at 7.)

Defendants asserted in their portion of the parties' P.R. 4-3 Joint Claim Construction and Prehearing Statement that this term is indefinite. (Dkt. No. 101, Ex. B at B-7.) Defendants' response brief does not address this term, and this term does not appear in the parties' P.R. 4-5(d) Joint Claim Construction Chart. (*See* Dkt. No. 122; *see also* Dkt. No. 126, Ex. B.) At the October 27, 2021 hearing, the remaining Defendants confirmed that they are not asserting indefiniteness and therefore this term is no longer in dispute.

The Court therefore construes **"security channel on top of the initial security channel"** to have its **plain and ordinary meaning**.

4. "applet"

"applet" ('218 Patent, Claims 1, 11, 14, 15; '855 Patent, Claims 1, 3; '787 Patent, Claims 1, 2, 6, 11)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning Alternatively: "software component configured to perform one or more specific tasks"	"application configured to perform a specific task"

(Dkt. No. 126, Ex. B at 2.)

Prior to the start of the October 27, 2021 hearing, the parties notified the Court that the

parties now agree that this term should be given its plain and ordinary meaning.

The Court therefore construes **"applet"** to have its **plain and ordinary meaning**.

5. "e-purse" and "electronic purse"

"e-purse" / "electronic purse" ('218 Patent, Claims 1, 11, 14, 15; '855 Patent, Claims 1, 3, 5; '787 Patent, Claims 1, 2, 6, 11)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning Alternatively: "system that maintains electronic financial information locally"	"application that stores electronic money locally (i.e., in the user's portable device)"

(Dkt. No. 126, Ex. B at 2.)

(a) The Parties' Positions

Plaintiff argues that "[t]he term is readily understandable and can be applied without construction," and "Defendants' construction finds no support in the intrinsic record." (Dkt. No. 116 at 11.) As to the prosecution history cited by Defendants, Plaintiff argues that "[t]he most relevant Office Action actually demonstrates that Defendants' construction is unwarranted and unsupported." (*Id.*) Plaintiff also argues, for example, that "[w]hile the specifications describe functions related to stored values on a card, those discussions do not amount to any disclaimer." (*Id.* at 13.)

Defendants respond that "an 'e-purse' is a well-known term of art," and "[d]uring prosecution of the '218 patent, RFCyber distinguished the prior art 'Atsmon' reference, which discloses an 'e-wallet,' by arguing that, as 'is commonly known in the art,' an 'e-wallet is *not the same* as [an] e-purse' and, unlike an e-wallet which stores credit cards or e-cards, an e-purse stores 'electronic money in a local portable device' . . . ." (Dkt. No. 122 at 7.) Defendants also cite the specification as well as the prosecution of a related patent. (*See id.* at 8–12.)

Plaintiff replies that "an e-purse, just like a physical purse, is not limited to only storing money (or being a stored-value card) and can store credit card numbers and other financial-related materials." (Dkt. No. 124 at 4.) Plaintiff argues that "[w]hile the asserted patents disclose embodiments that include locally stored money, Samsung identifies no disclaimer or lexicography that would justify limiting the claims." (*Id.* at 6.) Plaintiff also argues that "[n]othing in the prosecution history or in the specification amounts to a clear and unambiguous disavowal of claim scopes [sic] that would limit the claims to a local-only implementation, or to an 'application that stores electronic money locally.'" (*Id.* at 4.) As an alternative, Plaintiff proposes: "a system that maintains electronic financial information locally." (*Id.* at 7.)

At the October 27, 2021 hearing, Plaintiff argued that in the prosecution history relied upon by Defendants, the patentee distinguished accessing information remotely (as opposed to storing information locally) and did not limit the term "e-purse" in the manner proposed by Defendants. Moreover, Plaintiff argued that "electronic money" is not the same as cash because electronic money may still need to be settled after use.

(b) Analysis

Defendants cite prosecution history of the '218 Patent in which the patentee stated:

Atsmon teaches an interactive authentication system to allow a consumer to interact with a base station to receive coupons, special sales and other information with an electronic card. After a careful review, the Applicant concludes that Atsmon does not teach how to use a security channel to install and personalize an e-purse applet in a smart card. Atsmon only says that special client remote access software is downloaded, see Col. 32, lines-56-63, where that special client remote access software is for access to the website (e.g., a base station), no encryption, or any mechanism for a security channel are mentioned or described.

. . . [T]he Applicant submits [the] Shmueli [reference] could not be modified with [the] Atsmon [reference] or such modification would render Shmueli inoperable. The Applicant wishes to further point out that Atsmon describes entirely about e-wallet. It is commonly known in the art that e-wallet is not the same as e-purse. An e-wallet system has a user credit-card and personal info at the backend, an *e-card in the e-wallet* system is used as an identity card for *logging in into the system*. When shopping, the e-card can be used to *identify the user to retrieve the info and submit the info to the merchant site*. Evidently, *an e-purse in the instant application describes about electronic money in a local portable device*. Accordingly, the combination of Shmueli and Atsmon neither teaches nor suggests Claim 1, and Claim shall be allowable over Shmueli and Atsmon.

(Dkt. No. 116, Ex. E, Dec. 31, 2010 Response to Final OA, at 9–10 (p. 132–33 of 259 of Ex. E) (emphasis added).)

The patentee thus distinguished Shmueli and Atsmon based on the claimed invention using information stored locally rather than retrieving information from somewhere else.   This prosecution history therefore does not amount to a definitive statement by the patentee that the term "e-purse" requires *money* stored locally. *See Omega Eng'g Inc. v. Raytek Corp.*, 334 F.3d

1314, 1324 (Fed. Cir. 2003) ("As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on *definitive* statements made during prosecution.") (emphasis added).   To whatever extent this prosecution history can be read according to Defendants' interpretation, this would be only one of "multiple reasonable interpretations," and as a result there is no disclaimer. *Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1332 (Fed. Cir. 2004).

Defendants' reliance on the prosecution history of the '046 Patent is unavailing as well, in particular because the no-longer-asserted '046 Patent (attached to Defendants' responsive claim construction brief as Exhibit 1) includes different claim language that is not here at issue, such as the recital of "a balance in the e-purse." (*See* Dkt. No. 122, Ex. 2, Nov. 28, 2019 Response to First OA, at 8–10.)

Defendants also rely on disclosures regarding "funding" an e-purse. *See, e.g.*, '218 Patent at 7:19–55 ("The user desires to fund the e-purse from an account associated with a bank."). Further, Defendants cite disclosure of a "purse balance" or an "e-purse balance." '218 Patent at 5:9–18; *see* '009 Patent at 15:6 (continuation-in-part of the patents at issue for this disputed term). Defendants argue that these disclosures only make sense if an e-purse must hold stored value, not merely other financial information such as a credit card number, because typically a credit card is not "funded." The disclosures relied upon by Defendants, however, do not "clearly set forth a definition" for "e-purse" but rather describe the e-purse used in particular embodiments. *See CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (emphasis added).

Defendants also cite extrinsic evidence regarding the term "e-purse." (*See* Dkt. No. 122, Ex. 11, *GSA Government Smart Card Handbook* 63, § 2.4.6 (SAMSUNG00104563) (defining "Electronic Purse" as: "A chip-based application where cash or value is recorded on a chip and is

available for use in vending machines and at participating merchants, typically for small transactions. Through this application, merchants can replace labor-intensive cash transactions (counting, sorting, bundling, and transporting) with electronic transactions vending service providers can eliminate loading and emptying coins from machines, as well as eliminate the incentive for vandalism. Customers are able to reduce the need to carry and make payments with cash, particularly when exact change is required."); *see also id.*, Ex. 7, Common Electronic Purse Specifications, Technical Specification, Version 2.3, at 268 (Mar. 2001) (defining "Electronic Purse" as: "An electronic purse uses an integrated circuit for the storage and processing of monetary value that is used for purchase of goods or services. It is generally positioned to displace small value coins and cash purchase amounts. The card may be disposable or reloadable."); *id.*, Ex. 16, *Smart Card Handbook* 924 (3d ed. 2002) (defining "Electronic purse (e-purse)" as: "A card with a chip that must be loaded with an amount of money before it can be used for making payments. This type of payment is often called 'pay before'. Some typical examples are the German Geldkarte, the Austrian Quick purse, Visa Cash, Proton and Mondex. Electronic purses may also support . . . purse-to-purse transactions.") (emphasis added).) Defendants also cite the opinions of their experts. (*See* Dkt. No. 116, Ex. J, Aug. 19, 2021 Vanderhoof Decl., at ¶ 102; *see also id.*, Ex. K, Aug. 19, 2021 Smith Decl., at ¶¶ 71–72.)

Plaintiff, however, submits a technical dictionary that defines "e-purse" as "same as digital wallet" and that defines "digital wallet" as: "a piece of personalised software on the hard drive of a user's computer that contains, in coded form, such items as credit card information, digital cash, a digital identity certificate, and standardized shipping information, and can be used when paying for a transaction electronically." (Dkt. No. 124, Ex. N, Dictionary of Banking and Finance 101, 122 (3d ed.).) At the October 27, 2021 hearing, Defendants argued that this dictionary should not

be relied upon because although the Third Edition was "published 2003," this dictionary was then "Reprinted 2005, 2009" (*id.* at p. 3 of 5 of Ex. N.), and 2009 was three years after the 2006 filing date of the application to which the patents-in-suit claim priority.   Defendants asserted that a reprinting could include substantive revisions, although Defendants did not present any evidence of a change in this dictionary's definition of "digital wallet."   Based on the record before the Court, and even assuming (without deciding) that a three year difference is not contemporaneous for purposes of this claim construction analysis, the technical dictionary submitted by Plaintiff at a minimum raises doubts about Defendants' assertion that Defendants' proposed construction represents a well-established meaning of "e-purse" in the relevant art.

In light of this evidence, as well as the above-discussed absence of any definitive statement in the prosecution history that would support Defendants' proposed limitation, Defendants' proposal of "stores electronic money locally" would improperly limit the disputed term to a specific feature of particular disclosed embodiments. *See Phillips*, 415 F.3d at 1323.

As to Defendants' proposal of "(i.e., in the user's portable device)," this example of a "portable" device is not necessary for understanding the concept of an "e-purse."   Nonetheless, referring to a "device" will provide helpful context for how the word "locally" is being used. Further, Plaintiff argues that "an 'e-purse' is a system, not a single application." (Dkt. No. 124 at 6.)   However, even the disclosure cited by Plaintiff refers to "an e-purse *embedded in a device* (e.g., a cellphone)" ('218 Patent at 5:60–61 (emphasis added)), which weighs against Plaintiff's proposal of referring to an amorphous "system." Also, as cited by Plaintiff, the Summary section of the specification states: "Broadly speaking, the invention is related to a mechanism provided to *devices*, especially portable *devices*, *functioning as an electronic purse* (e-purse) to be able to

conduct transactions over an open network with a payment server without compromising security."

Id. at 1:50–54 (emphasis added). The Court therefore rejects Plaintiff's proposal of "system."

As to Defendants' proposal of "application," the Background section of the '009 Patent states that "the present invention is related to . . . provisioning an application such as an electronic purse that can be advantageously used in portable devices" ('009 Patent at 1:19–24), but the Summary section then states that "[a]ccording to one embodiment, a device is installed with an e-purse manager (i.e., an application)," wherein the disclosure of an "e-purse *manager*" application implies that the term "e-purse" could be something less than an entire "application." *Id.* at 2:41–52. The construction should therefore not be limited to an "application" but should instead refer more generically to "software."

The Court therefore construes **"e-purse"** and **"electronic purse"** to mean **"software that stores electronic financial information in a local device."**

6. "install" and "installed"

"install" / "installed" ('218 Patent, Claims 1, 11; '855 Patent, Claim 1; '787 Patent, Claims 2, 6; '009 Patent, Claim 14)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning Alternatively: "to set in place and prepare for operation"	"[store / stored] in non-volatile memory"

(Dkt. No. 126, Ex. B at 2–3.)

(a) The Parties' Positions

Plaintiff argues that "Defendants' construction adds needless verbiage and is redundant with other portions of the claim language." (Dkt. No. 116 at 14.)   Plaintiff also argues: "Defendants do not provide any reason that an 'installed' application must be stored in non-volatile memory; an application can be installed in volatile memory so long as it is ready for use. If the memory is blanked after a power loss, the application would just need to be reinstalled." (*Id.*)

Defendants respond that "RFCyber's position is nonsensical and not supported by any intrinsic or extrinsic evidence." (Dkt. No. 122 at 28.) Defendants argue, for example, that "[n]ot only does the fact that the claim requires the e-purse applet to be 'downloaded *and* installed' refute RFCyber's argument, it confirms that there is a difference between 'downloading' something onto a smart card – which can occur in volatile memory (e.g., RAM) – and 'installing' something onto a smart card – which must occur in non-volatile memory so that it remains on the smart card when the device loses power." (*Id.* at 28–29.)

Plaintiff replies that "nothing in the intrinsic or extrinsic evidence *requires* non-volatile memory," and "if the Court finds [Defendants'] added limitation inappropriate, it need not construe the term." (Dkt. No. 124 at 7.)   Alternatively, Plaintiff proposes that "if the Court feels that construction is necessary, it should construe install as 'to set in place and prepare for operation.'" (*Id.* at 8.)

At the October 27, 2021 hearing, Defendants urged that it makes no sense for an e-purse to disappear when a device is turned off because the user would lose all stored value and would need to install, configure, and fund the e-purse again.

(b) Analysis

Defendants cite the recital in Claim 1 of the '218 Patent that "the e-purse applet is downloaded and installed in the smart card." Defendants argue that because downloading can be into volatile memory, installing must occur in non-volatile memory. But Defendants do not persuasively support the premise that downloading occurs into volatile memory, let alone that installing must occur in a different type of memory than downloading. Instead, "downloaded" could refer to using either volatile or non-volatile memory, and "installed" can refer to operations that are carried out to make something ready for use.

This is also consistent with the understanding of the examiner during prosecution of the '218 Patent, wherein the examiner stated: "The conventional definition of installation is to set-up, establish, or place something that does not already exist in the ultimate location." (Dkt. No. 116, Ex. E, Oct. 1, 2010 Office Action, at 3 (p. 106 of 259 of Ex. E).) The examiner's understanding of this term can be given some weight. *See Salazar v. Procter & Gamble Co.*, 414 F.3d 1342, 1347 (Fed. Cir. 2005) ("Statements about a claim term made by an Examiner during prosecution of an application may be evidence of how one of skill in the art understood the term at the time the application was filed.").

Thus, Defendants do not demonstrate that the intrinsic evidence compels interpreting the term "install" as necessarily using non-volatile memory.

Extrinsic evidence cited by Defendants, which for example defines "install" as to place in a "permanent location," does not compel otherwise. (*See* Dkt. No. 122-16, *Oxford Dictionary of Computing* (5th ed. 2004).) As with their above-discussed arguments based on intrinsic evidence, Defendants make inferences that lack persuasive support as to requiring non-volatile memory. The technical documents cited by Defendants are also unpersuasive because those documents relate to

particular implementations rather than the invention as claimed. *See Phillips*, 415 F.3d at 1318, 1323; *see also* Dkt. No. 122, Ex. 10, GlobalPlatform Card Specification, Version 2.1.1, at p. 31, § 3.5 (Mar. 2003) ("The installation of an Application creates an instance from an Executable Module plus possibly Application data within Mutable Persistent Memory.").

The Court therefore expressly rejects Defendants' proposed construction, and no further construction is necessary. *See U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) ("Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy."); *see also O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) ("[D]istrict courts are not (and should not be) required to construe every limitation present in a patent's asserted claims."); *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2010) ("Unlike *O2 Micro*, where the court failed to resolve the parties' quarrel, the district court rejected Defendants' construction."); *ActiveVideo Networks, Inc. v. Verizon Commcn's, Inc.*, 694 F.3d 1312, 1326 (Fed. Cir. 2012); *Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015); *Bayer Healthcare LLC v. Baxalta Inc.*, 989 F.3d 964, 977–79 (Fed. Cir. 2021).

The Court therefore construes **"install"** and **"installed"** to have their **plain and ordinary meaning**.

7. "payment server"

<table>
<tr><td colspan="2" align="center">"payment server"
('218 Patent, Claims 1, 8, 11, 14, 15;
'787 Patent, Claims 1, 11)</td></tr>
<tr><td>Plaintiff's Proposed Construction</td><td>Defendants' Proposed Construction</td></tr>
<tr><td>Plain and ordinary meaning;

Alternatively
    "server for enabling a payment"</td><td>"server for settling a payment"</td></tr>
</table>

(Dkt. No. 126, Ex. B at 3.)

(a) The Parties' Positions

Plaintiff argues that this term is easily understandable, and "Defendants offer no justification, much less any clear and unmistakable reason, to alter the inventors' chosen language." (Dkt. No. 116 at 15.) Plaintiff also argues: "At most, the specification provides examples in which a 'payment server' may be 'used to enable and authenticate' transactions with a card. There is no lexicography or disclaimer to justify Defendants' new requirement for a 'server for settling a payment.'" (*Id.* at 16.) Further, Plaintiff argues that Defendants' expert "conflates this term with the term 'payment gateway' recited in the '046 Patent and attempts to import the construction for which Patentee advocated before the PTAB." (*Id.* (citation omitted).)

Defendants respond that "the intrinsic evidence makes clear that the 'payment server' is involved in settling payments." (Dkt. No. 122 at 41.) As to Plaintiff's statements regarding the term "payment gateway," Defendants argue that "the 'payment server' of the e-purse patents has the same functionality as the payment gateway of the '046 patent, and it too is situated between the user's personal device and a SAM, which in turn enables and authenticates transactions and is behind the payment server." (*Id*. at 42 (citation omitted).) Finally, Defendants argue that "the fact

that the payment server may do other things, such as personalizing and funding the e-purse, does not negate the fact that the patents require the 'payment server' to be involved in settling payments." (*Id.* at 43.)

Plaintiff replies that "the specifications of the Asserted Patents say nothing about 'settling a payment,'" and "the words 'settle' or 'settling' do not appear anywhere in the patents." (Dkt. No. 124 at 8.) "Instead," Plaintiff argues, "Samsung's limitation is imported . . . from a different claim term ('payment gateway') in the '046 Patent, which is actually directed to settling payments." (*Id.*) Plaintiff urges that "[t]he construction of a different term, in a different patent, with a different specification, does not govern this term." (*Id.*; *see id.* at 9.)

At the October 27, 2021 hearing, Defendants argued that requiring the "payment server" to be for settling payments is appropriate because otherwise the "security authentication module" would be redundant.

(b) Analysis

Claim 1 of the '218 Patent, for example, recites in part (emphasis added):

1. A method for providing an e-purse, the method comprising:
    providing a portable device including or communicating with a smart card pre-loaded with an emulator configured to execute a request from an e-purse applet and provide a response the e-purse applet is configured to expect, the portable device including a memory space loaded with a midlet that is configured to facilitate communication between the e-purse applet and a *payment server* over a wireless network, wherein the e-purse applet is downloaded and installed in the smart card when the smart card is in communication with the *payment server*, the portable device further includes a contactless interface that facilitates communication between the e-purse applet in the smart card and the *payment server* over a wired network;
        . . . .

As another example, Claim 1 of the '787 Patent recites an interface "configured to perform mobile commerce with a payment server."

Defendants do not show that the claim language implies "settling," which is a word that appears nowhere in the patents here at issue, despite there being various disclosures regarding "transactions," "commerce," and "purchasing" cited by Defendants. *See, e.g.*, '218 Patent at 1:8–11, 5:6–9, 8:8–10. Defendants' proposal would therefore tend to confuse rather than clarify the scope of the claims. The opinions of Defendants' experts are likewise unpersuasive. (*See* Dkt. No. 116, Ex. J, Aug. 19, 2021 Vanderhoof Decl., at ¶ 195; *see also id.*, Ex. K, Aug. 19, 2021 Smith Decl., at ¶¶ 123–25.)

As for Defendants' reliance on Post Grant Review ("PGR") proceedings involving the no-longer-asserted '046 Patent (attached to Defendants' responsive claim construction brief as Exhibit 1), the Patent Trial and Appeal Board stated: "we agree with Patent Owner and construe 'payment gateway' as 'a server or collection of servers for settling a payment.'" (Dkt. No. 122, Ex. 3, PGR2021-00029, Paper 10, July 23, 2021 Decision at 27–28.)

Although authority generally counsels in favor of interpreting terms consistently in related patents, *see, e.g.*, *SightSound Technologies, LLC v Apple Inc.*, 809 F3d 1307, 1316 (Fed. Cir. 2015), here the weight of the interpretation cited by Defendants is lessened by the attenuated nature of the familial relationship, the patents here at issue being related to the '046 Patent through multiple continuation-in-part applications. *See id.* Also, the '046 Patent is a descendent of the '218 Patent, not an ancestor, and the cited term at issue as to the '046 Patent, "payment gateway," is not the same term here at issue, "payment server." Defendants do not persuasively support their assertion that a person of ordinary skill in the art would understand the terms "payment gateway" and "payment server" to be interchangeable.

Finally, and perhaps most compellingly, whereas neither the '218 Patent nor the '787 Patent mention "settling" anywhere in the claims or the specification, the '046 Patent that was at

issue in the above-cited PGR discusses "settlement" and settling payments repeatedly throughout its specification. *See* '046 Patent at cols. 5–8, 19–21.

The Court therefore expressly rejects Defendants' proposed construction, and no further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568 ("Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy."); *see also O2 Micro*, 521 F.3d at 1362 ("[D]istrict courts are not (and should not be) required to construe every limitation present in a patent's asserted claims."); *Finjan*, 626 F.3d at 1207 ("Unlike *O2 Micro*, where the court failed to resolve the parties' quarrel, the district court rejected Defendants' construction."); *ActiveVideo*, 694 F.3d at 1326; *Summit 6*, 802 F.3d at 1291; *Bayer*, 989 F.3d at 977–79.

The Court accordingly construes **"payment server"** to have its **plain and ordinary meaning**.

8. "personalize," "personalized," "personalizing," and "personalization"

"personalize" / "personalized" / "personalizing" / "personalization" ('218 Patent, Claims 1, 11; '855 Patent, Claims 1, 3; '787 Patent, Claims 1, 2, 6, 11)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning	"[configuring / configure / configured / configuration] with information specific to the user"

(Dkt. No. 126, Ex. B at 3.)

(a) The Parties' Positions

Plaintiff argues that these terms are readily understandable, that "Defendants offer no justification, much less any clear and unmistakable reason, to alter the inventors' chosen language," and that "the cited portions of the file history say nothing about the meaning of 'personalize.'" (Dkt. No. 116 at 17.)

Defendants respond that "personalize" is a well-established term in the art of mobile payments, and also "it is logical that a smart card used for payment transactions must be personalized with information that uniquely identifies the user, in the same way that each credit card has its own card number." (Dkt. No. 122 at 37–38.)

Plaintiff replies that Defendants fail to account for the disclosure of "default PINs" as part of "the essential data to be personalized into an e-purse." (Dkt. No. 124 at 10 (quoting '218 Patent at 2:1–5).) Moreover, Plaintiff argues, "the extrinsic evidence that Samsung and its experts cite does not support its construction." (*Id.* at 10.)

At the October 27, 2021 hearing, Defendants argued that "personalization" makes a card unique relative to all other cards.

(b) Analysis

The disclosure of "default PINs," cited by Plaintiff, is as follows:

> In one embodiment, the essential data to be personalized into an e-purse include one or more operation keys (e.g., a load key and a purchase key), *default PINs*, administration keys (e.g., an unblock PIN key and a reload PIN key), and passwords (e.g., from Mifare).

'218 Patent at 2:1–5 (emphasis added); *see id.* at 5:54–59 (similar). These "default PINs," however, could vary from user to user and, in any event, can subsequently be personalized by a user. *See id.* at 6:26–7:9. The disclosure of "default PINs" therefore does not undercut

Defendants' argument that "personalizing" refers to configuring with information specific to the user.

The extrinsic evidence submitted by Defendants is also persuasive that the term "personalize" has a well-established meaning in the relevant art as adding information that, although not necessarily specific to a particular person, is specific information that prepares a card for use.   (*See* Dkt. No. 122, Ex. 11, *GSA Government Smart Card Handbook*, at A-2 (SAMSUNG00104654) ("Card Personalization — Refers to the modification of a card such that it contains data specific to the cardholder."); *see also id.*, Ex. 7, Common Electronic Purse Specifications, Technical Specification, Version 2.3, at 274 (Mar. 2001) (defining "Personalization" as: "The process of initializing a card with data that makes it unique from all other cards. This includes account data and cardholder information in the case of credit or debit accounts."); *id.*, Ex. 16, *Smart Card Handbook* 954 (3d ed. 2002) (defining "Personalization" as: "The process of associating a card with a person. This can be done using physical personalization (e.g. embossing or laser engraving) as well as by electronic personalization (loading personal data in the memory of the smart card). The term 'individualization' would be a more exact description of this process, since *it is not always necessary to enter personal data into the chip* when electronic personalization is performed, for instance in the production of *anonymous* [] prepaid SIMs") (emphasis added).) The opinions of Defendants' experts do not compel limiting these terms so as to be "specific to the user." (*See* Dkt. No. 116, Ex. J, Aug. 19, 2021 Vanderhoof Decl., at ¶ 123; *see also id.*, Ex. K, Aug. 19, 2021 Smith Decl., at ¶¶ 91–92.)

The Court therefore construes these disputed terms as set forth in the following chart:

Term	Construction
"personalize"	**"configure with specific information"**

"personalized"	"configured with specific information"
"personalizing"	"configuring with specific information"
"personalization"	"configuration with specific information"

9. "smart card pre-loaded with [an/the] emulator"

"smart card pre-loaded with [an/the] emulator" ('218 Patent, Claims 1, 11)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning	[smart card with an] "emulator installed by the smart card issuer"

(Dkt. No. 126, Ex. B at 3.)

(a) The Parties' Positions

Plaintiff argues that "[t]he plain meaning of 'preloaded' does not limit the preloading as done by any particular entity," and "Defendants identify no lexicography or clear and unmistakable disclaimer to support their additional limitation." (Dkt. No. 116 at 18.)

Defendants respond that the opinions of Defendants' experts are unrebutted that a person of ordinary skill in the art would have understood that a smart card "pre-loaded with an emulator" is one in which an emulator has been installed by the smart card issuer, and "there is no disclosure in the specification of an emulator being loaded by *anyone* other than the card issuer." (Dkt. No. 122 at 20 (citations omitted).)

Plaintiff replies that "[u]nder Samsung's proposed construction, it is not even clear who a 'smart card issuer' is," that "Samsung and its experts do not even identify any passages in the specification where a card issuer pre-loads the emulator," and that "Samsung identifies no

disclaimer that would limit the emulator to being preloaded by the issuer." (Dkt. No. 124 at 11

(citations omitted).)

At the October 27, 2021 hearing, Plaintiff argued "pre-loaded" refers to when, not who,

performs the loading. Defendants responded that "pre-loaded" refers to both when and who.

(b) Analysis

Claim 1 of the '218 Patent recites (emphasis added):

1. A method for providing an e-purse, the method comprising:
    providing a portable device including or communicating with a *smart card
pre-loaded with an emulator* configured to execute a request from an e-purse applet
and provide a response the e-purse applet is configured to expect, the portable
device including a memory space loaded with a midlet that is configured to
facilitate communication between the e-purse applet and a payment server over a
wireless network, wherein the e-purse applet is downloaded and installed in the
smart card when the smart card is in communication with the payment server, the
portable device further includes a contactless interface that facilitates
communication between the e-purse applet in the smart card and the payment server
over a wired network;
    . . . .

Defendants cite disclosures in the specification regarding configuration of a card "by a card

issuer" or "when the card is issued." *See, e.g.*, '218 Patent at 3:54–56 ("Data on a single function

card is protected by a set of access keys. These keys are configured onto the card when the card

is issued."); *id.* at 6:29–33 ("a default security setting by a card issuer"); *id.* at 6:48–49 ("A default

application domain can be installed by a card issuer . . . .").) These disclosures, however, focus

on who rather than when. A fair reading of this method claim limitation, which recites "providing

a portable device including or communicating with a smart card pre-loaded with an emulator," is

that "pre-" refers to when rather than who. On balance, proper effect can be given to the patentee's

use of the term "*pre*-loaded" by limiting this disputed term to an emulator loaded prior to the smart

card being provided. The contrary opinions of Defendants' experts are unpersuasive. (*See* Dkt.

No. 116, Ex. J, Aug. 19, 2021 Vanderhoof Decl. at ¶ 223; *see also id.*, Ex. K, Aug. 19, 2021 Smith

Decl., at ¶ 137.)

The Court therefore construes **"smart card pre-loaded with [an/the] emulator"** to mean

"smart card with an emulator loaded prior to the smart card being provided."

10. "smart card," "card module," and "smart card module"

<table>
<tr>
<td colspan="2" align="center">"smart card" / "card module" / "smart card module"
('218 Patent, Claims 1, 11;
'855 Patent, Claims 1, 3, 10;
'787 Patent, Claims 1, 6, 8, 11)</td>
</tr>
<tr>
<td>Plaintiff's Proposed Construction</td>
<td>Defendants' Proposed Construction</td>
</tr>
<tr>
<td>Plain and ordinary meaning;

Alternatively:
   "emulated or physical card that can execute secure commands with data"</td>
<td>"a card that includes an integrated circuit chip with a microprocessor that provides secure access to the memory of the card"</td>
</tr>
</table>

(Dkt. No. 126, Ex. B at 3–4.)

(a) The Parties' Positions

Plaintiff argues that "Defendants seek to add numerous limitations without support, and

without identifying any lexicography or disclaimer," and "Defendants' construction contradicts

the teachings of the specification, and the recitation of the claims." (Dkt. No. 116 at 19.) For

example, Plaintiff submits that the specification discloses that a card may be "software emulated,"

so Plaintiff argues that "the smart card does not exclude hardware or software that emulates a smart

card." (*Id.* at 20–21 (citing '218 Patent at 3:51–54).)

Defendants respond that "the patents use the term in a manner that is consistent with its

well-established meaning at the time and do not purport to re-define the term." (Dkt. No. 122 at 14

(citation omitted).) Defendants argue that "[t]he e-purse patents describe the claimed smart card

as a physical device, repeatedly teaching that the smart card module is 'embedded' in (not downloaded, loaded, or run on) a portable device." (*Id.* at 15 (citation omitted).) Defendants also cite prosecution history and extrinsic technical documents. (*See id.* at 16–18.) As to disclosure cited by Plaintiff regarding a card being "software emulated," Defendants argue that a physical card could include software functionality to emulate a particular type of smart card. (*Id.* at 19.)

Plaintiff argues that "[s]ince a single functional card is an embodiment of a smart card, and since a single functional card may be 'software emulated running on a type of media,' a 'smart card' cannot be limited as Samsung proposes." (Dkt. No. 124 at 11.) Plaintiff argues that Defendants seek to limit the claims to preferred embodiments. (*Id.* at 13.) Plaintiff also argues that "the prosecution history does not rise to a clear and unmistakable disclaimer sufficient to limit the claim's scope." (*Id.* at 12.) Further, Plaintiff argues that "even Samsung's own extrinsic evidence allows for smart cards that are emulated." (*Id.*) Alternatively, Plaintiff argues that "if the Court finds construction helpful, the term should be construed as 'emulated or physical card that can execute secure commands with data' as consistent with the intrinsic evidence discussed above." (*Id.* at 13.)

At the October 27, 2021 hearing, Defendants argued for example that the disclosure of "a cellphone 202 embedded with a smart card module" (referring to Figure 2 of the '218 Patent) demonstrates that a smart card is a physical thing.

(b) Analysis

As a threshold matter, Defendants argue that these three disputed terms ("smart card," "card module," and "smart card module") should be construed as having the same meaning, and Plaintiff does not argue otherwise.

As to the parties' dispute, Defendants cite disclosures regarding a smart card having an operating system, which Defendants argue implies that a smart card is a physical card. *See* '218 Patent at 4:8–22 ("Card Manager Security 106, referring to a general security framework of a preload operating system in a smart card . . . ."), 4:47–5:4 ("According to one embodiment, a smart card has a *preloaded smart card operation system* [*sic*] that provides security framework to control the access to the smart card (e.g., an [*sic*] installation of external applications into the smart card).") (emphasis added). Defendants also cite prosecution history in which the patentee referred to a smart card having "computing power." (Dkt. No. 116, Ex. E, Sept. 7, 2011 Response to 1st OA, at 8–9 (pp. 220–21 of 259 of Ex. E) (emphasis added).) Further, Defendants note, Claim 1 of the '218 Patent recites "an e-purse security authentication module (SAM) *external* to the smart card."

The specification, however, also discloses:

> Physical security 102 refers to a security mechanism provided by a single functional card to protect data stored on the card. The card may be hardware implemented or *software emulated* running on a type of media.

Id. at 3:51–54 (emphasis added); *see id.* at 2:9–24 ("providing a portable device embedded with a smart card module pre-loaded with an emulator"). This disclosure that a smart card may be "software emulated" undercuts Defendants' arguments and demonstrates that a "smart card" need not itself be a distinct physical card (though, of course, the "smart card" must at some level be implemented as, or be part of, some physical structure on which the "smart card" is at least emulated, just as any software requires some hardware on which to operate).

Finally, the extrinsic evidence submitted by Defendants is consistent with this conclusion because Defendants do not show that the term "smart card" strictly requires its own microprocessor. (*See* Dkt. No. 122, Ex. 7, Common Electronic Purse Specifications, Technical Specification, Version 2.3, at 277 (Mar. 2001) ("A *typical* smart card chip includes a

microprocessor or CPU . . . .") (emphasis added); *see also id.*, Ex. 16, *Smart Card Handbook* 970

(3d ed. 2002) ("Strictly speaking, the term 'smart card' is an alternate name for a microprocessor

card, in that it refers to a chip card that is 'smart.' Memory cards thus do not properly fall into the

category of smart cards. However, the expression 'smart card' is *generally used* in English-

speaking countries to refer to *all* types of cards containing chips.") (emphasis added).)   The

opinions of Defendants' experts do not compel otherwise. (*See* Dkt. No. 116, Ex. J, Aug. 19, 2021

Vanderhoof Decl., at ¶¶ 173–90; *see also id.*, Ex. K, Aug. 19, 2021 Smith Decl., at ¶¶ 111–20.)

Finally, Defendants cite the continuation-in-part '009 Patent, which discloses that "[a] smart card

or microprocessor cards contain volatile memory and microprocessor components." *See* '009

Patent at 1:47–48. Defendants' reliance on the '009 Patent is unavailing in light of the '009 Patent

having a different specification. Moreover, the disclosure cited by Defendants also states that "[i]n

general, a smart card, chip card, or integrated circuit card (ICC), is *any* pocket-sized card with

embedded integrated circuits." *Id.* at 1:45–47 (emphasis added).

Based on the foregoing intrinsic and extrinsic evidence, the Court hereby construes **"smart**

card," "card module," and **"smart card module"** to mean **"physical or emulated card that**

provides secure access to stored data."

11. "security authentication module" and "SAM"

"security authentication module" / "SAM" ('218 Patent, Claims 1, 11, 14; '855 Patent, Claim 1; '787 Patent, Claim 6)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning	"device containing secret data necessary to authenticate transactions"

(Dkt. No. 126, Ex. B at 4.)

(a) The Parties' Positions

Plaintiff argues that this term is readily understandable without construction, and "Defendants' proposal seeks to add numerous unsupported limitations and should be rejected." (Dkt. No. 116 at 21.) For example, Plaintiff argues that "[n]othing in the intrinsic evidence limits the SAM to a 'device,' as opposed to a software module," and "the portions of the file history cited by Defendants show the opposite." (*Id.*) Plaintiff also argues that "[w]hile the specifications contain embodiments where the SAM is implemented using keys to authenticate transactions, there is no lexicography or disclaimer limiting it to those embodiments." (*Id.* at 22 (citation omitted).)

Defendants respond: "RFCyber does not suggest that it acted as its own lexicographer to define the term 'SAM' to mean something other than the well-established meaning it had in the mobile payments field. RFCyber nonetheless seeks to re-define the term to include software residing in a payment server, even though the patents make clear that a SAM is a device distinct from the payment server." (Dkt. No. 122 at 39.) Defendants argue that the statement by the patent examiner cited by Plaintiff did not relate to the location of the SAM and also cannot override the meaning of this term in the art. (*Id.* at 40.)

Plaintiff argues that "Samsung provides no reason, other than the coincidental overlap in initials, to apply the [extrinsic] 'secure application module' definition to 'security authentication module.'" (Dkt. No. 124, at 13.) Plaintiff also cites "prosecution history, where the Examiner noted that the SAM could be a device or software." (*Id.* (citation omitted).)

(b) Analysis

Defendants cite disclosure in the specification regarding a security authentication module being "behind the payment server":

> According to another embodiment, the present invention is a system for providing an e-purse, the system comprises a portable device embedded with a smart card module preloaded with an emulator, the portable device including . . . a SAM module configured to enable the e-purse, wherein the SAM module is *behind the payment server* when the e-purse is caused to communicate with the payment server via the midlet over a wireless network (M-commerce in FIG. 2) or via the agent on a PC over a wired network (E-commerce in FIG. 2).

> * * *

> With the security channel is established using the application provider's application security domain, the first set of data can be personalized to the purse applet. The second set of data can also be personalized with the same channel, too. However, if the data are in separate SAM, then a new security channel with the same key set (or different key sets) can be used to personalize the second set of data.

'218 Patent at 2:25–41, 6:55–61 (emphasis added).

On balance, these disclosures do not express or imply that a "security authentication module" must be a physically separate device. Also of note, Plaintiff submits prosecution history of the '218 Patent in which the examiner noted that the SAM "appears to be either an externally run program/applet or remote hardware" (Dkt. No. 116, Ex. E, Feb. 3, 2010 Office Action, at 2 (p. 60 of 259 of Ex. E)), which supports finding that a SAM may be hardware or software. The examiner's apparent understanding of this term can be given some weight. *See Salazar*, 414 F.3d at 1347 ("Statements about a claim term made by an Examiner during prosecution of an application may be evidence of how one of skill in the art understood the term at the time the application was filed.").

Defendants' reliance on extrinsic evidence regarding a "secure application module" is unpersuasive, as this evidence pertains to a different term that merely shares the same acronym as the "security authentication module" recited in the claims here at issue. (*See* Dkt. No. 122, Ex. 6, Common Electronic Purse Specifications, Business Requirements, Version 7.0, at 77 (Mar. 2000) (defining "Secure Application Module"); *see also id.*, Ex. 16, *Smart Card Handbook* 688, 963,

965 (3d ed. 2002) (discussing "secure application module"; defining "secure application module" as "security module," which in turn is defined as "[a] component that is secured both mechanically and computationally and is used to store secret data and execute cryptographic algorithms").) The opinions of Defendants' experts are likewise unpersuasive. (*See* Dkt. No. 116, Ex. J, Aug. 19, 2021 Vanderhoof Decl. at ¶ 143; *see also id.*, Ex. K, Aug. 19, 2021 Smith Decl., at ¶¶ 94–95.)

Finally, in light of this finding that a "security authentication module" is something *other than* the "secure application module" discussed above that is evidently known in the art, Plaintiff's proposal of a "plain and ordinary meaning" construction is insufficient. Instead, "some construction of the disputed claim language will assist the jury to understand the claims." *TQP Dev., LLC v. Merrill Lynch & Co.*, No. 2:08-CV-471-WCB, 2012 WL 1940849, at *2 (E.D. Tex. May 29, 2012) (Bryson, J., sitting by designation). Defendants persuasively argue that a "security authentication module" contains data necessary to authenticate transactions.

The Court therefore construes **"security authentication module"** and **"SAM"** to mean **"hardware or software module containing data necessary to authenticate transactions."**

12. "device information of [a/the] secure element"

"device information of [a / the] secure element" ('009 Patent, Claim 14)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning	"a sequence of characters uniquely identifying [a / the] secure element"

(Dkt. No. 126, Ex. B at 4.)

(a) The Parties' Positions

Plaintiff argues that whereas "Defendants' construction would limit the term to one possible embodiment of device information," "Defendants identify no disclaimer or lexicography that would support departing from the language of the claims and so limiting the term." (Dkt. No. 116 at 22–23.)

Defendants respond that "[t]he specification of the '009 patent supports Defendants' proposed construction as it includes an express definition for 'device information' . . . ." (Dkt. No. 122 at 26 (citation omitted).) Defendants also submit that "[t]he specification also provides examples of 'device information,' including such things as a smart card ID, manufacturer information and a batch number – each of which is a sequence of characters uniquely identifying the secure element: . . . ." (*Id.* at 26–27.) Further, Defendants argue that "the doctrine of claim differentiation does not serve to broaden claims beyond their meaning in light of the specification, and does not override clear statements of scope in the specification and the prosecution history." (*Id.* at 27 (quoting *Toro Co. v. White Consolidated Indus.*, 199 F.3d 1295, 1302 (Fed. Cir. 1999).)

Plaintiff replies that "[t]his term requires no construction," and "Samsung seeks only to limit it from its plain and ordinary meaning to one possible example." (Dkt. No. 124 at 14.) Moreover, Plaintiff argues, "the specification also provides an example of device information that does not uniquely identify the secure element, an issuer security domain using *default keys*." (*Id.* (citing '009 Patent at 6:55–58, 8:58–60).) Plaintiff also urges that the doctrine of claim differentiation applies as to dependent Claim 7 of the '009 Patent, which Plaintiff argues "specifically cover[s] Samsung's construction." (*Id.* at 15.)

At the October 27, 2021 hearing, Defendants argued that to be "secure," the device information in this disputed term must be unique.

(b) Analysis

Defendants submit that the '009 Patent expressly defines "device information" as follows:

> According to one embodiment, the present invention is a method for personalizing a secure element associated with a computing device. The method comprises initiating data communication with a server, sending device information of the secure element in responding to a request from the server after the server determines that the secure element is registered therewith, wherein *the device information is a sequence of characters uniquely identifying the secure element*, and the request is a command causing the computing device to retrieve the device information from the secure element, receiving at least a set of keys from the server, wherein the keys are generated in the server in accordance with the device information of the secure element, and storing the set of keys in the secure element to facilitate a subsequent transaction by the computing device.

'009 Patent at 2:66–3:7 (emphasis added); *see also id.* at 3:21–26 ("wherein the device information is a sequence of characters uniquely identifying the secure element . . .").

The disclosures relied upon by Defendants do not "clearly set forth a definition" for "device information" but rather describe the device information in particular embodiments. *See CCS Fitness*, 288 F.3d at 1366; *see also* '009 Patent at 2:66–3:7, 3:21–26. Also, Defendants do not persuasively support their assertion that being "secure" necessarily requires "unique" identification.

As to the additional "examples of 'device information'" cited by Defendants (Dkt. No. 122 at 26–27), these specific features of particular disclosed embodiments should not be imported into the claims. *See Phillips*, 415 F.3d at 1323; *see also* '009 Patent at 8:30–37, 12:22–28, 13:10–15. The opinions of Defendants' experts do not compel otherwise. (*See* Dkt. No. 116, Ex. J, Aug. 19, 2021 Vanderhoof Decl., at ¶ 254–55; *see also id.*, Ex. K, Aug. 19, 2021 Smith Decl., at ¶¶ 163 & 169.)

The Court therefore expressly rejects Defendants' proposed construction, and no further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at

1362; *Finjan*, 626 F.3d at 1207; *ActiveVideo*, 694 F.3d at 1326; *Summit 6*, 802 F.3d at 1291; *Bayer*,

989 F.3d at 977–79.

The Court accordingly construes **"device information of [a / the] secure element"** to have

its **plain and ordinary meaning**.

13. "key set installed on the secure element"

"key set installed on the secure element" ('009 Patent, Claim 14)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning	"at least two keys stored in nonvolatile memory on the secure element"

(Dkt. No. 126, Ex. B at 4.)

Prior to the start of the October 27, 2021 hearing, the parties notified the Court that the

parties now agree that this term should be given its plain and ordinary meaning.

The Court accordingly hereby construes **"key set installed on the secure element"** to have

its **plain and ordinary meaning.**

14. "secure element"

"secure element" ('009 Patent, Claim 14)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning Alternatively: "a device or software module capable of securely hosting software"	"a separate device with its own processor, such as a smart card, included in a mobile device, for securely hosting an application"

(Dkt. No. 126, Ex. B at 4.)

Prior to the start of the October 27, 2021 hearing, the parties notified the Court that the

parties now agree that this term should be given its plain and ordinary meaning.

The Court therefore hereby construes **"secure element"** to have its **plain and ordinary**

meaning.

15. "method for funding an e-purse"

"method for funding an e-purse" ('855 Patent, Claim 1)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Preamble is not limiting	Preamble is limiting

(Dkt. No. 126, Ex. B at 4.)

(a) The Parties' Positions

Plaintiff argues that the preamble is not limiting because the body of the claim recites a

structurally complete invention without any reliance on the preamble. (*See* Dkt. No. 116 at 27–

28.)

Defendants respond that "[b]ecause the preamble provides antecedent basis for the term

'e-purse,' which appears later in claim 1 of the '855 patent, it is limiting." (Dkt. No. 122 at 12.)

Also, Defendants argue that "[i]t cannot be seriously disputed that the '855 patent is directed to

'funding an e-purse,'" and "[b]ecause the preamble is the only part of the claim that makes clear

that the claim is directed to 'funding an e-purse,' the preamble is limiting." (*Id.* at 13 (citation

omitted).)

Plaintiff replies that the claim body is structurally complete, and "'e-purse' is used

throughout the '855 Patent's claims; the recitation of 'an e-purse' in the preamble does not render

it limiting." (Dkt. No. 124 at 18 (citation omitted).) Plaintiff also argues that "[e]ven if the

recitation of 'an e-purse' in the preamble is limiting, it does not render 'for funding an e-purse'

limiting." (*Id.* at 19 (citation omitted).) Moreover, Plaintiff submits that "there is no dispute that

the claims are directed to an e-purse," and "the specification describes transactions other than

funding a stored-value card, which Samsung improperly attempts to limit 'e-purse' to here." (*Id.*

at 19–20 (citations omitted).) Finally, Plaintiff argues that "the preamble only describes the

intended purpose of the invention and is not necessary to understand the claims," and "the

applicants did not rely on the preamble to distinguish over the prior art." (*Id.* at 20.)

At the October 27, 2021 hearing, Plaintiff argued that the preamble is not limiting because

the preamble does not specify a particular type of e-purse and because "funding" is merely an

intended use. Defendants responded that whereas the body of the claim refers to a "fund transfer

request," the preamble recital of "funding" requires putting money *into* the e-purse. Defendants

argued that the entire preamble is limiting because it provides antecedent basis, is essential to

understand the claim, contains a feature underscored by the patent as important, and tethers the

claim to the focus of the described invention.

(b) Analysis

> In general, a preamble limits the invention if it recites essential structure or steps,
> or if it is "necessary to give life, meaning, and vitality" to the claim. *Pitney Bowes*[,
> *Inc. v. Hewlett-Packard Co.*], 182 F.3d [1298,] 1305 [(Fed. Cir. 1999)].
> Conversely, a preamble is not limiting "where a patentee defines a structurally
> complete invention in the claim body and uses the preamble only to state a purpose
> or intended use for the invention." *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d
> 1550, 1553 (Fed. Cir. 1997).

Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002).

In general, there is a "presumption against reading a statement of purpose in the preamble

as a claim limitation." *Marrin v. Griffin*, 599 F.3d 1290, 1294–95 (Fed. Cir. 2010); *see Allen*

Eng'g Corp. v. Bartell Indus., 299 F.3d 1336, 1346 (Fed. Cir. 2002) ("Generally, the preamble

does not limit the claims."); *see also Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 769–71 (Fed. Cir. 2018) (in preamble reciting "[a] computer network for providing an information delivery service for a plurality of participants," finding "information delivery service" to be non-limiting because it "merely describe[s] intended uses for what is otherwise a structurally complete invention").

A preamble may be limiting, however, if it states a "fundamental characteristic of the claimed invention," "serves to focus the reader on the invention that is being claimed," or "states the framework of the invention." *On Demand Mach. Corp. v. Ingram Indus., Inc.*, 442 F.3d 1331, 1343 (Fed. Cir. 2006). Also, a preamble may be limiting if it sets forth a feature "underscored as important by the specification." *Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1358 (Fed. Cir. 2012) (quoting *Catalina*, 289 F.3d at 808). Additionally, in some cases, "[w]hen a patent . . . describes the features of the 'present invention' as a whole, this description limits the scope of the invention." *Forest Labs., LLC v. Sigmapharm Labs., LLC*, 918 F.3d 928, 933 (Fed. Cir. 2019) (quoting *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1308 (Fed. Cir. 2007)).

Further, "[w]hen limitations in the body of the claim rely upon and derive antecedent basis from the preamble, then the preamble may act as a necessary component of the claimed invention." *Eaton Corp. v. Rockwell Int'l Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003); *see C.W. Zumbiel Co. v. Kappos*, 702 F.3d 1371, 1385 (Fed. Cir. 2012) (finding preambles limiting because "'containers' as recited in the claim body depend on 'a plurality of containers' in the preamble as an antecedent basis").

Here, Claim 1 of the '855 Patent recites:

> 1. A *method for funding an e-purse*, the method comprising:
> receiving a PIN from a user of a portable device, wherein the portable device is a near field communication (NFC) enabled device that includes a card module;

initiating a request from a midlet embedded in the portable device after the PIN is verified, wherein the midlet sends the request to an e-purse applet;

causing the e-purse applet to compose a response to the request;

sending the response by the e-purse applet over a wireless network to a server administrating *the e-purse*, the server configured to verify the response against an account in a financial institution across a network, a *fund transfer request* is initiated by the server to the financial institution when the response is successfully verified;

receiving commands from the server in responding to the fund transfer request; and

causing an emulator in the portable device to update a transaction log after an authenticity of the commands is verified by the e-purse applet wherein *the e-purse* in the portable device has been personalized by operations including:

establishing an initial security channel between the card module and an e-purse security authentication module (SAM) external to the card module to install and personalize the e-purse applet in the card module, and

creating a security channel on top of the initial security channel to protect subsequent operations of the card module with the e-purse SAM, wherein any subsequent transactions with the e-purse are conducted over the security channel.

The preamble's recital of "an e-purse" thus provides antecedent basis for "the e-purse" recited in the body of the claim. *See Eaton*, 323 F.3d at 1339 (quoted above).

Defendants argue that the entire preamble is limiting because "an e-purse" is recited in connection with the remainder of the preamble, which recites "*funding* an e-purse." *See Proveris Scientific Corp. v. Innovasystems, Inc.*, 739 F.3d 1367, 1373 (Fed. Cir. 2014) ("The phrase 'the image data' clearly derives antecedent basis from the 'image data' that is defined in greater detail in the preamble as being 'representative of at least one sequential set of images of a spray plume.'"); *see also U.S. Auto. Ass'n v. Wells Fargo Bank, N.A.*, No. 2:18-CV-366-JRG-RSP, 2019 WL 3423652, at *7–8 (E.D. Tex. July 28, 2019).

Here, the preamble is not limiting because unlike *Proveris*, the preamble recital of "an e-purse" provides no additional detail regarding the e-purse itself, and also because "for funding" is a statement of purpose or intended use. *See TomTom Inc. v. Adolph*, 790 F.3d 1315, 1323 (Fed.

Cir. 2015) ("that [a] phrase in the preamble . . . provides a necessary structure for [the] claim . . . does not necessarily convert the entire preamble into a limitation, particularly one that only states the intended use of the invention."); *see also Marrin*, 599 F.3d at 1294–95 (quoted above); *Allen Eng'g*, 299 F.3d at 1346 (quoted above); *Acceleration Bay*, 908 F.3d at 769–71 (quoted above).

In short, this is not a case in which the patentee "use[d] both the preamble and the body to define the subject matter of the claimed invention." *Bell Commc'ns Research, Inc. v. Vitalink Commc'ns Corp.*, 55 F.3d 615, 620 (Fed. Cir. 1995).

The Court therefore hereby finds that **the preamble of Claim 1 of the '855 Patent is not limiting.**

16. "contactless interface that facilitates communication between the e-purse applet in the smart card and the payment server over a wired network" and "e-purse SAM originally used to issue the e-purse / existing security authentication module (SAM) originally used to issue the e-purse"

"contactless interface that facilitates communication between the e-purse applet in the smart card and the payment server over a wired network" ('218 Patent, All Claims)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**

Plain and ordinary meaning	Google:
	    Indefinite
	
	Samsung:
	    Plain and ordinary meaning

"e-purse SAM originally used to issue the e-purse / existing security authentication module (SAM) originally used to issue the e-purse" ('218 Patent, Claims 3, 14)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning	Google: Indefinite and the term "existing SAM" in claim 3 lacks an antecedent basis Samsung: Plain and ordinary meaning

(Dkt. No. 101, Ex. A at A-2, A-4; *id.*, Ex. B at B-14–15.)

Defendant Google asserted in the parties' P.R. 4-3 Joint Claim Construction and Prehearing Statement that these terms are indefinite (Dkt. No. 101, Ex. B at B-14), but Defendant Google has been dismissed, and the Samsung Defendants have not asserted indefiniteness. (*Id.* at B-14 n.7; *see* Dkt. No. 122; *see also* Dkt. No. 126, Ex. B.) To whatever extent the assertion of indefiniteness is still live, any such assertion is hereby expressly rejected.

The Court therefore construes **"contactless interface that facilitates communication between the e-purse applet in the smart card and the payment server over a wired network"** and **"e-purse SAM originally used to issue the e-purse / existing security authentication module (SAM) originally used to issue the e-purse"** to have their **plain and ordinary meaning** (apart from the Court's constructions of constituent terms).

V. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit.

The parties may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion

of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

So ORDERED and SIGNED this 17th day of November, 2021.

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RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE